



UNITED STATES PATENT AND TRADEMARK OFFICE

ML

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,050	12/14/2000	Christopher Tate	583-1044	7139

23644 7590 04/04/2007
BARNES & THORNBURG LLP
P.O. BOX 2786
CHICAGO, IL 60690-2786

EXAMINER

SHELEHEDA, JAMES R

ART UNIT	PAPER NUMBER
----------	--------------

2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/737,050	Applicant(s) TATE ET AL.	
	Examiner James Sheleheda	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-11,13-15,17-19,21-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-11,13-15,17-19,21-23 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 1/29/07 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-7, 9-11, 13-15, 17-19, 21-23 and 25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2623

4. Claims 1, 3, 4, 7, 10, 13, 14, 18, 21, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (Hendricks) (6,201,536) (of record) in view of Hodge et al. (Hodge) (6,564,381) and Banker et al. (Banker) (6,201,536).

As to claim 1, while Hendricks discloses a system for streaming data (Fig. 1) comprising: a **content providing server** (operations center, 202) capable of storing content and communicating the content (column 8, lines 8-54) to a plurality of client terminator units (set top terminals, 220) via a communications network (concatenated cable system, 210; column 7, lines 1-3 and column 8, line 65-column 9, line 3), and a **distribution server** (Headend, 208) coupled in-line between the content providing server and the plurality of client terminator units (see Fig. 1),

wherein the distribution server is arranged to **generate** at least a plurality of onward data streams (staggered streams of a single program; column 34, lines 32-59) and **transmit** the plurality of onward data streams (column 34, lines 32-59) to the plurality of client terminator units, respectively (transmitted to the subscribers who will receive the program at that start time; column 34, lines 39-59), in response to control data received from the content providing server (column 8, lines 31-44) and in response to an incoming data stream received or being received from the content providing server and corresponding to the content (program package signals; column 8, lines 8-30 and 44-54),

wherein the plurality of onward data streams **correspond** substantially to the content (column 8, line 65-column 9, line 3 and column 34, lines 32-59) and the distribution server **offsets** in time each of the plurality of onward data streams with

Art Unit: 2623

respect to a preceding one of said plurality of onward data streams (column 34, lines 31-39) by an offset value (wherein the start time of each channel is staggered so as to be offset from the preceding one; column 34, lines 32-46) indicated within the control data (schedule indicating staggered start times; column 8, lines 31-43 and column 34, lines 31-39 and lines 47-59), he fails to specifically disclose communicating content in response to requests for the content and wherein the data streams are offset by a single value.

In an analogous art, Hodge discloses a video distribution system (Fig. 2; column 3, lines 21-51) wherein a super hub controller (13) will determine when content is to be distributed in response to requests for the content (requests by motion picture studios as to how and when the content is to be distributed; column 4, line 64-column 5, line 11) for the typical benefit of ensuring maximum revenue distribution from broadcast video programs (column 3, lines 40-51).

Additionally, in an analogous art, Banker discloses a broadcast television system (Fig. 1) for providing NVOD services (column 2, lines 40-68) wherein a plurality of data streams consisting of the same program are transmitted continuously and sequentially (column 11, lines 23-42, Fig. 6A, 8 and 9) with each data stream offset with respect to a preceding one of said plurality of onward data streams by a single offset value (such as 15 minutes; see Fig. 6A, 8 and 9; column 11, lines 23-42) for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie (column 11, lines 23-42 and Fig. 6A).

Art Unit: 2623

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's system to include communicating content in response to requests for the content, as taught by Hodge, for the typical benefit of ensuring maximum revenue distribution from broadcast video programs.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's and Hodge's system to include wherein the data streams are offset by a single value, as taught by Banker, for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie.

As to claim 10, while Hendricks discloses a method of streaming data (Fig. 1) between a content providing server (operations center, 202) and a plurality of client terminator units (set top terminals, 220), the method comprising:

receiving at a **distribution server** (Headend, 208) control data (column 8, lines 31-44) and an incoming data stream corresponding to content (program package signals; column 8, lines 8-30 and 44-54), the incoming data stream being received from the content providing server (column 8, lines 8-30 and 44-54),

in response, generating a plurality of data streams (staggered streams of a single received program; column 34, lines 32-59), and

transmitting the at least the first and second onward data streams (column 34, lines 32-59) to the plurality of client terminator units, respectively (transmitted to the subscribers who will receive the program at that start time; column 34, lines 39-59), in

Art Unit: 2623

response to the incoming data stream (in response to receiving the program from the operations center; column 8, lines 8-30 and 44-54);

wherein the plurality of onward data streams **correspond** substantially to the content (column 8, line 65-column 9, line 3 and column 34, lines 32-59) and where each of the plurality of onward data streams are **offset** in time by the multicast server with respect to a preceding one of said plurality of onward data streams by an offset value (column 34, lines 31-39) indicated in the control data (schedule indicating staggered start times; column 8, lines 31-43 and column 34, lines 31-39 and lines 47-59), he fails to specifically disclose communicating content in response to requests for the content and wherein the data streams are offset by a single value.

In an analogous art, Hodge discloses a video distribution system (Fig. 2; column 3, lines 21-51) wherein a super hub controller (13) will determine when content is to be distributed in response to requests for the content (requests by motion picture studios as to how and when the content is to be distributed; column 4, line 64-column 5, line 11) for the typical benefit of ensuring maximum revenue distribution from broadcast video programs (column 3, lines 40-51).

Additionally, in an analogous art, Banker discloses a broadcast television system (Fig. 1) for providing NVOD services (column 2, lines 40-68) wherein a plurality of data streams consisting of the same program are transmitted continuously and sequentially (column 11, lines 23-42, Fig. 6A, 8 and 9) with each data stream offset with respect to a preceding one of said plurality of onward data streams by a single offset value (such as 15 minutes; see Fig. 6A, 8 and 9; column 11, lines 23-42) for the typical benefit of

Art Unit: 2623

providing a clear and consistent indication of the wait required for a user to start viewing the movie (column 11, lines 23-42 and Fig. 6A).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's system to include communicating content in response to requests for the content, as taught by Hodge, for the typical benefit of ensuring maximum revenue distribution from broadcast video programs.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's and Hodge's system to include wherein the data streams are offset by a single value, as taught by Banker, for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie.

As to claims 14, 18 and 22, while Hendricks discloses a programmed computer (network manager, 214) for streaming data (Fig. 1) between a content providing server (operations center, 202) and a plurality of client terminator units (set top terminals, 220), comprising memory having at least one region for storing computer executable program code (Fig. 3; column 11, lines 14-29) and

a processor for executing the program code stored in memory (column 11, lines 21-29), wherein the program code includes:

code to receive control data (column 8, lines 31-44) from the content providing server (column 8, lines 8-30 and 44-54),

code to receive at least part of an incoming data stream corresponding to content (program package signals; column 8, lines 8-30 and 44-54) from the content providing server (column 8, lines 8-30 and 44-54),

code to generate, in response to the received control data and incoming data stream received or being received (in response to receiving the program from the operations center; column 8, lines 8-30 and 44-54) a plurality of onward data streams (staggered streams of a single received program; column 34, lines 32-59), and

code to transmit the plurality of onward data streams (column 34, lines 32-59) to the plurality of client terminator units, respectively (transmitted to the subscribers who will receive the program at that start time; column 34, lines 39-59),

wherein the plurality of onward data streams **correspond** substantially to the content (column 8, line 65-column 9, line 3 and column 34, lines 32-59) and wherein each of said plurality of onward data stream is **offset** in time with respect to a preceding one of said plurality of onward data streams by an offset value (column 34, lines 31-39) indicated in the control data (schedule indicating staggered start times; column 8, lines 31-43 and column 34, lines 31-39 and lines 47-59), he fails to specifically disclose communicating content in response to requests for the content and wherein the data streams are offset by a single value.

In an analogous art, Hodge discloses a video distribution system (Fig. 2; column 3, lines 21-51) wherein a super hub controller (13) will determine when content is to be distributed in response to requests for the content (requests by motion picture studios as to how and when the content is to be distributed; column 4, line 64-column 5, line 11)

Art Unit: 2623

for the typical benefit of ensuring maximum revenue distribution from broadcast video programs (column 3, lines 40-51).

Additionally, in an analogous art, Banker discloses a broadcast television system (Fig. 1) for providing NVOD services (column 2, lines 40-68) wherein a plurality of data streams consisting of the same program are transmitted continuously and sequentially (column 11, lines 23-42, Fig. 6A, 8 and 9) with each data stream offset with respect to a preceding one of said plurality of onward data streams by a single offset value (such as 15 minutes; see Fig. 6A, 8 and 9; column 11, lines 23-42) for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie (column 11, lines 23-42 and Fig. 6A).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's system to include communicating content in response to requests for the content, as taught by Hodge, for the typical benefit of ensuring maximum revenue distribution from broadcast video programs.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's and Hodge's system to include wherein the data streams are offset by a single value, as taught by Banker, for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie.

As to claim 3, Hendricks, Hodge and Banker disclose wherein the offset value is provided by the content providing server (wherein Operations center indicates the start

Art Unit: 2623

times of the program streams; see Hendricks at column 8, lines 31-44 and column 34, lines 32-39).

As to claims 4, 13, 17, 21 and 25, Hendricks, Hodge and Banker disclose arranging to loop a first one of the plurality of onward data stream at least once (see Banker at column 11, lines 23-42 and Fig. 9).

5. Claims 2, 11, 15, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks, Hodge and Banker as applied to claims 1, 10, 14, 18 and 22 above, and further in view of Debey (5,701,582) (of record).

As to claims 2, 11, 15, 19 and 23, while Hendricks, Hodge and Banker disclose the generating of first and second onward data streams, they fail to specifically disclose wherein data streams are generated prior to receipt of all of the incoming data stream.

Debey discloses the transmission of digital programming streams (column 14, lines 22-36), received at A/V digitizing units, (72 in Fig. 7A, column 13 lines 64-67 and column 14, lines 1-21), which are generated prior to receipt of all of an incoming data stream (column 14, lines 22-36), for the typical advantage of transmitting live television feeds to viewers as they are received.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks, Hodge and Banker's system to include wherein data streams are generated prior to receipt of all of the incoming data stream,

Art Unit: 2623

as taught by Debey, for the typical advantage of transmitting live television feeds to viewers as they are received.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Hodge, Banker and Fluss (6,304,578) (of record).

As to claim 5, while Hendricks discloses a multicast server for streaming data (Headend, 208), comprising a processor unit (column 11, lines 21-29) coupled to a storage device (file server, 215),

the processor unit being arranged to receive control data (column 8, lines 31-44) and an incoming data stream corresponding to content (program package signals; column 8, lines 8-30 and 44-54), the incoming data stream being received from a content providing server (operations center, 202; column 8, lines 8-54) and being arranged to store the content in the storage device (column 9, line 51-column 10, line 6),

wherein the processor unit is further arranged to generate a plurality of onward data streams (staggered streams of a single program; column 34, lines 32-59) for transmission to a plurality of client terminator units, respectively (transmitted to the subscriber set top terminals, 220 who will receive the program at that start time; column 34, lines 39-59), in response to the control data (column 8, lines 31-44) and incoming data stream (program package signals; column 8, lines 8-30 and 44-54),

wherein the plurality of onward data streams correspond substantially to the content (column 8, line 65-column 9, line 3 and column 34, lines 32-59) and wherein

Art Unit: 2623

each of the plurality of onward data streams are **offset** in time by the multicast server with respect to a preceding one of said plurality of onward data streams by an offset value (column 34, lines 31-39) indicated in the control data (schedule indicating staggered start times; column 8, lines 31-43 and column 34, lines 31-39 and lines 47-59), he fails to specifically disclose communicating content in response to requests for the content, a router coupled to the processor and wherein the data streams are offset by a single value.

In an analogous art, Hodge discloses a video distribution system (Fig. 2; column 3, lines 21-51) wherein a super hub controller (13) will determine when content is to be distributed in response to requests for the content (requests by motion picture studios as to how and when the content is to be distributed; column 4, line 64-column 5, line 11) for the typical benefit of ensuring maximum revenue distribution from broadcast video programs (column 3, lines 40-51).

Additionally, in an analogous art, Fluss discloses a video distribution system (Fig. 1) wherein a cable head end (103) will include a router (105; column 4, lines 32-39) for the typical benefit of routing data packets to the appropriate users (column 4, lines 16-20).

Also, in an analogous art, Banker discloses a broadcast television system (Fig. 1) for providing NVOD services (column 2, lines 40-68) wherein a plurality of data streams consisting of the same program are transmitted continuously and sequentially (column 11, lines 23-42, Fig. 6A, 8 and 9) with each data stream offset with respect to a preceding one of said plurality of onward data streams by a single offset value (such as

Art Unit: 2623

15 minutes; see Fig. 6A, 8 and 9; column 11, lines 23-42) for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie (column 11, lines 23-42 and Fig. 6A).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's system to include communicating content in response to requests for the content, as taught by Hodge, for the typical benefit of ensuring maximum revenue distribution from broadcast video programs.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks' system to include a router, as taught by Fluss, for the typical benefit of ensuring that data packets to be transmitted are correctly routed to the appropriate users.

Also, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendrick's and Hodge's system to include wherein the data streams are offset by a single value, as taught by Banker, for the typical benefit of providing a clear and consistent indication of the wait required for a user to start viewing the movie.

As to claim 6, Hendricks, Hodge and Fluss disclose wherein the router is arranged to transmit the plurality of onward data streams to the plurality of client terminator units, respectively (wherein the router transmits each data packet to the respective user; see Fluss at column 4, lines 34-45).

Art Unit: 2623

As to claim 9, Hendricks, Hodge, Fluss and Banker disclose arranging to loop a first one of the plurality of onward data stream at least once (see Banker at column 11, lines 23-42 and Fig. 9).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks, Hodge, Fluss and Banker as applied to claim 5 above, and further in view of Debey.

As to claim 5, while Hendricks, Hodge, Fluss and Banker disclose the generating of first and second onward data streams, they fail to specifically disclose wherein data streams are generated prior to receipt of all of the incoming data stream.

Debey discloses the transmission of digital programming streams (column 14, lines 22-36), received at A/V digitizing units, (72 in Fig. 7A, column 13 lines 64-67 and column 14, lines 1-21), which are generated prior to receipt of all of an incoming data stream (column 14, lines 22-36), for the typical advantage of transmitting live television feeds to viewers as they are received.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hendricks, Hodge, Fluss and Banker's system to include wherein data streams are generated prior to receipt of all of the incoming data stream, as taught by Debey, for the typical advantage of transmitting live television feeds to viewers as they are received.

Conclusion

Art Unit: 2623

8. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on _____
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Registration Number: _____

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. () _____ - _____ on _____
(Date)

Typed or printed name of person signing this certificate:

Signature: _____

Registration Number: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James Sheleheda
Patent Examiner
Art Unit 2623

JS


SCOTT E. BELIVEAU
PRIMARY PATENT EXAMINER